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Experience	UNITED STATES DEPARTMENT OF COMMERCE November 1997 - Present Oceanographer. National Oceanic and Atmospheric Administration, Atlantic Oceanographic and Meteorological Laboratory, Physical Oceanography Division. Oceanographer. Study of ocean dynamics using remote sensing procedures.	Miami, Fl, USA
	UNIVERSITY OF MIAMI June 1999 - Present Rosenstiel School of Marine and Atmospheric Science, Division of Meteorology and Physical Oceanography. Adjunct Assistant Professor.	Miami, Fl, USA
	UNIVERSITY OF MIAMI June 1991 - October 1997 Senior Research Associate (June 1993 - October 1997) and Post-Doctoral Fellow (June 1991-June 1993). Division of Meteorology and Physical Oceanography. Analysis of raw satellite altimeter data to study variability of ocean dynamics. Study of the relationship between the ocean thermal and dynamic fields.	Miami, Fl, USA
	NAVAL HYDROGRAPHIC INSTITUTE August 1981 - August 1983 Research Assistant. Underwater Acoustics Division. Theoretical and experimental studies of transmission loss and bottom sound reflection off the Argentinian coast. Theoretical studies of seasonal variations of the thermocline in the South Atlantic Ocean.	Buenos Aires, Argentina
Education	UNIVERSITY OF MIAMI May 1991 Ph.D. in Applied Marine Physics/Ocean Engineering. Dissertation title: "Ray and wave chaos in underwater acoustics".	Coral Gables, Fl, USA
	THE PENNSYLVANIA STATE UNIVERSITY August 1985	State College, Pa, USA

M.S. in Acoustics.

Thesis title: "Effect of the Biot's slow compressional wave on the normal mode attenuation coefficient for shallow water sound propagation".

BUENOS AIRES INSTITUTE OF TECHNOLOGY

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B.S. in Physical Oceanography/Ocean Engineering.

Publications - In Press

Investigation of the Brazil Current Front Dynamics from Altimeter Data. G. Goni and I. Wainer, *J. Geophys. Res.*, 2001.

Publications-Published

Transition regions and their role in the relationship between sea surface height and subsurface temperature structure in the Atlantic Ocean. D. Mayer, R. Molinari, M. Baringer and G. Goni, *J. Geophys. Res.*, **28**, 3943-3946, 2001.

Identification of the Kuroshio Extension and its Northern Branch from Altimeter and Hydrographic Data During November 1992 - August 1999: Mesoscale Dynamics and Variability. *Geophys. Res. Lett.*, **28**, 1759-1762, S. Sainz-Trapaga, G. Goni, T. Sugimoto, 2001.

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Low-salinity Lenses at Barbados, West Indies: Their Origin, Frequency and Variability. P. Kelly, K. Lwiza, R. Cowen and G. Goni, *J. Geophys. Res.*, **105**, 19699-19708, 2000.

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Three Agulhas Rings Observed During the Benguela Current Experiment. S. Garzoli, P. Richardson, C. Duncombe Rae, D. Fratantoni, G. Goni and A. Roubicek. *J. Geophys. Res.*, **104**, 20971-20985, 1999.

Transport Estimates of the Kuroshio Current from Satellite Altimeter Data, in Ecosystem Dynamics of the Kuroshio-Oyashio Transition Region. G. Goni. Terazaki, Ohtani, Sugimoto and Watanabe (Editors), Published by the Japan Marine

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Monitoring the Upper Southeastern Atlantic Transports Using Altimeter data. S. Garzoli, G. Goni, A. Mariano and D. Olson, *J. Mar. Res.*, **55**, 453-481, 1997.

Dynamics of the Brazil-Malvinas Confluence Based on Inverted Echo Sounders and Altimetry. G. Goni, S. Kamholz, S. Garzoli and D. Olson, *J. Geophys. Res.*, **101**, 16273-16289, 1996.

Mesoscale Ocean Variability Signal from GEOSAT Altimeter Data in the SW Atlantic Ocean: A Comparison of Three Different Data Sets. G. Goni, G. Podesta, O. Brown and J. Brown, Bolm Inst. Oceanogr., Sao Paulo, **43**, 101-110, 1995.

An Investigation of Sound Ray Dynamics in the Ocean Volume Using an Area Preserving Mapping. F. Tappert, G. Goni and M. Brown, *Journal of Wave Motion*, **14**, 93-99, 1992.

Weak Chaos in an Area-Preserving Mapping for Sound Ray Propagation. *Physics Letters*. F. Tappert, M. Brown and G. Goni, **A,153**, 181-185, 1991.

Chaos in Underwater Acoustics, in *Ocean Variability and Acoustic Propagation*. F. Tappert, M. Brown and G. Goni, J. Potter and A. Warn-Varnas (eds.), Kluwer Academic Publishers, The Netherlands, 139-160, 1991

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Surface Mixed Layer and Temperature and Layer Depth in Waters off the Argentinian Coast. S. Blanc, J. Novarini and G. Goni, *J. Geophys. Res.*, **88**, 5987-5996, 1983.

Technical Reports

CTD/O₂, LADCP and XBT Measurements Collected Aboard the R/V Seaward Johnson, November-December 1998: North Brazil Current Rings Experiment Cruise 1 (NBC-1). C. Fleurant, D. Wilson, W. Johns, S. Garzoli, R. Smith, D. Fratantoni, P. Richardson and G. Goni. NOAA Data Report OAR AOML-35, 257pp, 1999.

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Invited Conferences

Rings of the North Brazil Current from Altimetry. SUNY Stony Brook, November 2000.

Transport Estimates of the Kuroshio Extension Current from Altimetry Data. University of Tokyo, October 1998.

Use of Altimetry for Ocean Dynamics Studies. University of Santiago de Compostela, Galicia, Spain, March 1998.

Uses of GEOSAT Altimetry to Study Western Boundary Currents. Third Symposium on Ocean Sciences, Puerto Madryn, Argentina, September 1993.

Chaos in Underwater Acoustic. Second Symposium on Ocean Sciences, Puerto Madryn, Argentina, October 1992.

Chaos: Principles and Applications to the Study of Marine Science. Second Symposium on Ocean Sciences, Puerto Madryn, Argentina, October 1992.

Selected Abstracts and Conferences

A census of North Brazil current rings observed from Topex/Poseidon altimetry: 1992-1999. G. Goni and W. Johns. IAPSO/IABO Meeting, Mar del Plata, Argentina, October 2001.

Investigation of the Brazil Current front from altimeter data. G. Goni and I. Wainer. IAPSO/IABO Meeting, Mar del Plata, Argentina, October 2001.

Comparison of Hydrographic and Altimetric Estimates of Sea Level Height Variability in the Atlantic Ocean. D. Mayer, M. Baringer, R. Molinari and G. Goni.

2000 AGU Meeting, San Francisco, December 2000.

Virtual Poster Session on western boundary currents (<http://www.po.gso.uri.edu/wbc/>).
S. Sainz-Trapaga, G. Goni and T. Sugimoto, November 2000.

Transport Estimates and Variability of the Kuroshio Extension Current from Satellite Altimetry Data. G. Goni, S. Sainz-Trapaga, and T. Sugimoto. 2000 Western Pacific Geophysics Meeting, Tokyo, Japan, June 2000.

Identification and Variability of the Kuroshio Extension and its Northern Branch from Altimeter and Hydrographic Data During October 1992 - November 1999. S. Sainz-Trapaga, G. Goni, and T. Sugimoto. 2000 Western Pacific Geophysics Meeting, Tokyo, Japan, June 2000.

Role of the Upper Ocean Structure on the Intensification of Hurricane Bret from Satellite Altimetry. G. Goni, L. Shay, P. Black, M. Huber, S. Jacob, T. Cook and J. Cione. 24th Conference on Hurricanes and Tropical Meteorology, Fort Lauderdale, May-June 2000.

Global Analogues of Deep Warm Upper Ocean Layers: Hurricane Heat Potential Estimates. L. Shay, G. Goni, P. Black, S. Jacob, J. Cione and E. Uhlhorn. 24th Conference on Hurricanes and Tropical Meteorology, Fort Lauderdale, May-June 2000.

Couple Air-Sea Interactions During Hurricane Bonnie. T. Cook, L. Shay, P. Black, G. Goni. M. Huber, S. Jacob and J. Cione. 24th Conference on Hurricanes and Tropical Meteorology, Fort Lauderdale, May-June 2000.

The Annual Cycle of the Brazil-Malvinas Confluence Region in the NCAR Climate System Model. I. Wainer, P. Gent and G. Goni. AMS Southern Oceans Meeting, Santiago (Chile), April 2000.

Impact of North Brazil Current Rings on the Eastern Caribbean. Garraffo, Z. D., Johns, W. E., Chassignet, E. P., and Goni, G. J. AGU Oceans Science Meeting, San Antonio, January 2000.

Impact of North Brazil Current Rings on the Eastern Caribbean. W. Johns, Z. Garraffo, E. Chassignet, G. Goni, D. Fratantoni and D. Wilson. First Biennial IASI Science Meeting, Panama, November 1999.

Estimates of Hurricane Heat Potential in the western North Atlantic Ocean, Caribbean Sea and Gulf of Mexico, using TOPEX/POSEIDON- derived Sea Height Anomaly Data. G. Goni, M. Huber, R. Cheney, L. Shay, P. Black and T. Cook. First Biennial IASI Science Meeting, Panama, November 1999.

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Altimeter Data for Operational Use in the Marine Environment. S. Digby, T. Antczak, G. Born, R. Leben, S. Barth, R. Cheney, G. Goni, D. Foley, G. Jacobs.

The Ocean Observing System for Climate, St. Raphael (France), October 1999.

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TOPEX/POSEIDON-derived Atlantic Ocean Hurricane Heat Content Estimates. G. Goni, M. Huber, L. Shay. In *79th American Meteorological Society Meeting, 23rd Conference on Hurricanes and Tropical Meteorology*, Dallas, TX, January 10-15th, Vol II:1037-1040, 1999.

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Synoptic Study of North Brazil Current Rings from Altimeter Data. G. Goni and W. Johns, AGU 1999 Spring Meeting, Boston, June 1999.

Low-salinity Lenses at Barbados, West Indies: Their Origin, Frequency and Variability. P. Kelly, K. Lwiza, R. Cowen and G. Goni, AGU 1999 Spring Meeting, Boston, June 1999.

The North Brazil Current Rings Experiment. Fratantoni, D., P. Richardson, W. Johns, C. Fleurant, R. Smith, S. Garzoli, D. Wilson and G. Goni, AGU 1999 Spring Meeting, Boston, June 1999.

The North Brazil Current Retroflection: Two Recent Surveys. Wilson, D., S. Garzoli, G. Goni, W. Johns, R. Smith, C. Fleurant, P. Richardson and D. Fratantoni, AGU 1999 Spring Meeting, Boston, June 1999.

Western Boundary Current Variability from Altimeter Data, G. Goni and S. Garzoli, 1998 Japan-GLOBEC Meeting, Mutsu City and Hakodate (Japan), August 1998.

Benguela Current Experiment. S. Garzoli, P. Richardson, C. Duncombe Rae, D. Frantantoni and G. Goni, EGS meeting, Paris (France), April 1998.

Origin and evolution of the Benguela Current Experiment rings by Altimetry. G. Goni and S. Garzoli, Ocean Science Meeting, San Diego, January 1998.

Benguela Current Experiment. S. Garzoli, P. Richardson, C. Duncombe Rae, D. Frantantoni, J. Mantel, A. Roubicek, P. Frantantoni, G. Goni and C. Whittle. Ocean Science Meeting, San Diego, January 1998.

Monitoring the upper layer southeastern Atlantic transports and eddy field using altimeter data. G. Goni, S. Garzoli, A. Mariano, D. Olson and O. Brown. 1996 AGU Fall Meeting, San Francisco, December 1996.

Dynamics of the Southwestern Atlantic Ocean using Altimetry, Radiometry and Echosounders G. Goni, G. Podesta, D. Olson, O. Brown and S. Garzoli. VI Latinamerican Congress of Oceanography, Mar del Plata (Argentina), October 1995.

Long Term Variations in the Brazil-Malvinas Confluence. D. Olson, G. Podesta, L. Smith, E. Chassignet, G. Goni, S. Garzoli, S. Kamholz, R. Evans and O. Brown. *Annales Geophysicae*, Part II Oceans, Atmosphere, Hydrology & Nonlinear Geophysics Suppl 11 to Vol 11, C164 (1993).

Estimates of Kinetic Energy and Potential Vorticity from Inverted Echo Sounders and GEOSAT Altimetry in the Brazil-Malvinas Confluence Area. G. Goni, G. Podesta, D. Olson, S. Kamholz and S. Garzoli. *EOS Transactions*, AGU (Abstract), 74(16), p.171, 1993 Spring AGU Meeting, Baltimore, May 1993.

A comparison of AVHRR- and GEOSAT-Derived Locations of the Brazil Current Surface Front. G. Podesta, G. Goni and O. Brown. 1992 Fall AGU Meeting, San Francisco, December 1992.

Comparison of GEOSAT Sea Level Height Residuals in the SW Atlantic Using Three Orbit Correction Methods G. Goni, J. Brown, O. Brown and G. Podesta. AGU-CGU-MSA 1992 Spring Joint Meeting, Montreal (Canada), May 1992.

A search for wave chaos in a simple range-dependent Underwater Acoustic Waveguide. F. Tappert, M. Brown and G. Goni. 118th Meeting of the ASA, State College (PA), May 1990.

An Investigation of Range-Dependent Sound Ray Propagation in the Ocean Volume Using an Area Preserving Mapping. F. Tappert, M. Brown and G. Goni,

118th Meeting of the ASA, State College (PA), May 1990.

Chaos in Underwater Acoustics. F. Tappert, M. G. Brown G. Goni and K. Smith. Institute of Acoustics, Loughborough University (UK), December 1989.

Exponential Growth of Multipaths under Chaotic Conditions in a Simple Deterministic Range-Dependent Waveguide. F. Tappert, M. Brown and G. Goni. *J. Acoust. Soc. Am.* Suppl. 1, **85**, 1989.

Chaos and Hyperchaos in Shallow Water Acoustics. F. Tappert, M. Brown and G. Goni. *J. Acoust. Soc. Am.* Suppl. 1, Vol 84, 1988.

Effect of BIot's Slow Compressional Wave on the Normal-mode Attenuation Coefficient for Shallow-water Propagation. G. Goni, *J. Acoust. Soc. Amer.*, **80**, 1996.

Funded Proposals

Implementation of One High-Density XBT line and IMET Instrumentation in the Tropical Atlantic, funded by NOAA/OGP, July 2001 - June 2006. G. Goni (principal investigator), M. Baringer, R. Weller and D. Hosom (co-investigators).

Air-Sea Flux Estimation in High Wind Boundary Layers, funded by ONR. October 2000 - September 2006. Principal Investigators: P. G. Black, K. Katsaros, G. Goni, W. Drennan, T. Crawford, J. Carswell and P. Chang.

Rings of the North Brazil Current: Their Generation and Role in the Atlantic Meridional Overturning Cell, funded by NSF, 1998-2001. William Johns, Gustavo Goni, Silvia Garzoli, Amy Ffield, Philip Richardson and David Frantantoni. National Science Foundation.

Air-Sea Coupling Mechanisms in Tropical Cyclones, funded by NSF, 1995-1998. Lynn Shay and Gustavo Goni

Miscellaneous

Member of the American Geophysical Union.
Member of the American Meteorological Society.

Member of Student Committees

Joaquin Angel Trinanes Fernandez. University of Santiago de Compostela, Spain,
Ph.D, March 1998.

Carlos Lentini, PhD, RSMAS/University of Miami, current.

Carlos Fonseca, PhD, University of Sao Paulo, current.

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